



Review of Draft Plan

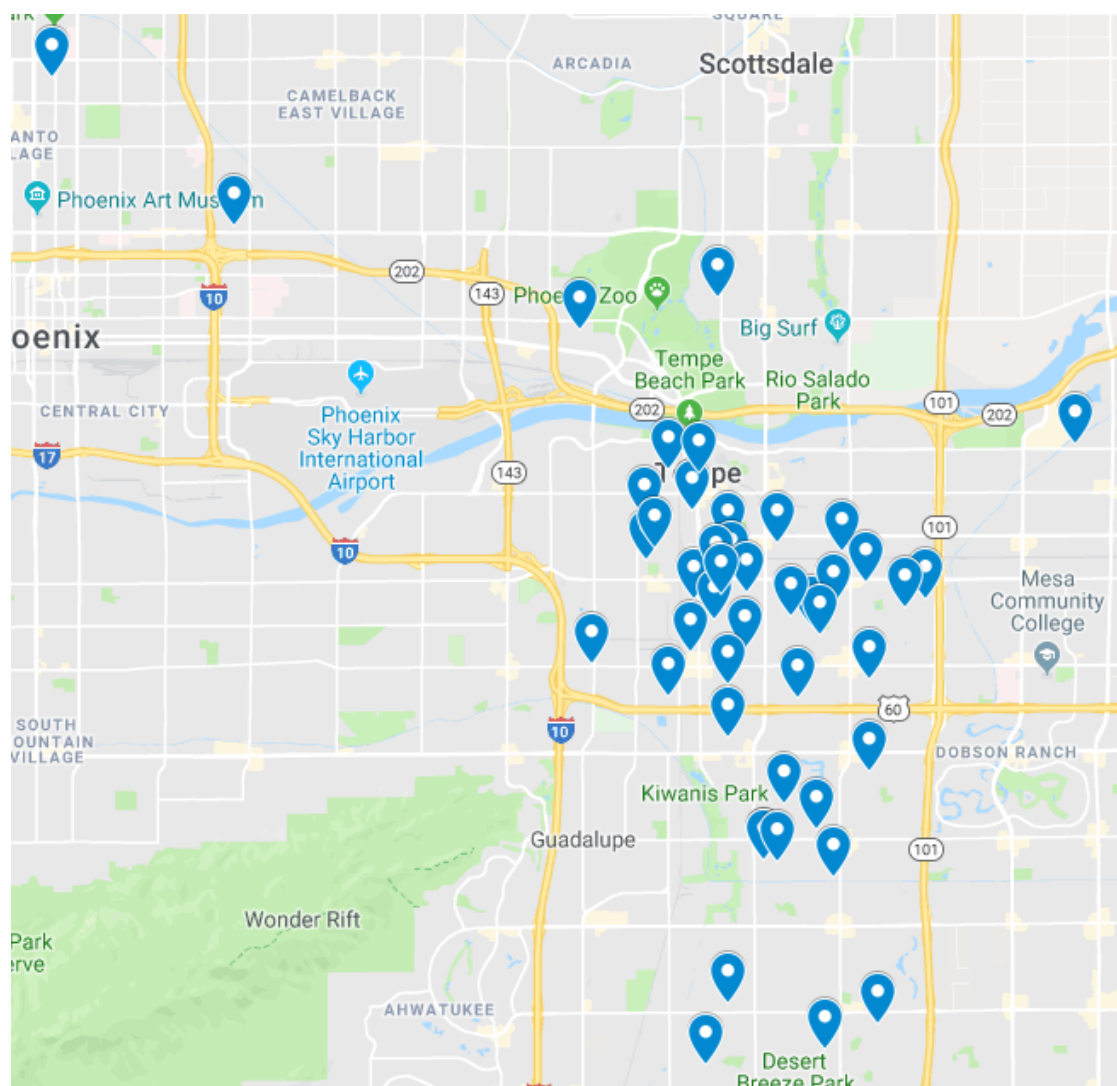
Public Input Summary September 2019

OVERVIEW

Feedback was collected on the draft Climate Action Plan (CAP). The CAP includes twelve actions to reduce emissions in energy and transportation while also increasing resilience to extreme heat.

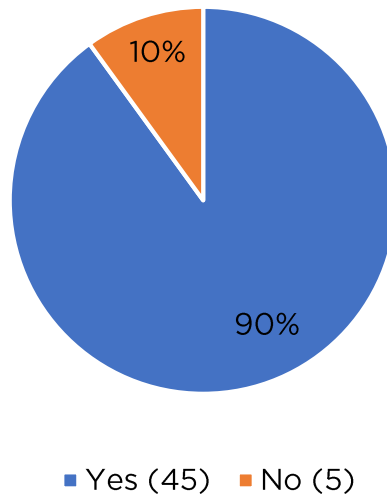
Public meetings were held on Tuesday, Sept. 10, 2019 and Saturday, Sept. 21, 2019. There were 83 attendees at the Sept. 10 meeting and 8 attendees at the Sept. 21 meeting. The survey to provide feedback on the CAP was posted online from Aug. 26 – Sept. 22, 2019 on Tempe Forum. A total of 51 survey responses were received, with 10 coming from the Sept. 10 meeting, 1 from the Sept. 21 meeting and 40 online responses from Tempe Forum. Meeting attendees also provided input by participating in an interactive feedback exercise during the meeting.

MAP OF SURVEY RESPONDENTS



SURVEY RESPONSES

1. Do you support the proposed Climate Action Plan



Total responses: 50

Why or why not?

Yes Responses:

1. Although it is hard to believe Tempe will make much of a difference every little bit helps and it's good to set an example.
2. Anything we can do to impact climate change is a good step for our city. It also sends a clear message of the importance and seriousness of this needed action, not just for us but for other cities as well.
3. As a German exchange student, I was really happy to see many people caring for the environment and sustainability. Especially here, in a desert area, climate change will have great impact on the people living here. Therefore, the immigration of CC is very urgent and can only be achieved by including as many people as possible.
4. As a progressive city Tempe needs to set an example to help heal the planet. Doing good action for our environment does not have to be hard. It can be fun and a community builder, which you are doing, GREAT job.
5. Because it's important to actually do something about climate change rather than just read about it and be sad that not enough is being done.
6. 1. Climate change actions on energy, transportation, and heat are very important for our city, society, and economy. 2. The plan does not try to do everything at once - but rather focuses on a set of feasible actions. 3. The plan's actions are based on best practices that have been proven to be effective. 4. The plan has been developed with broad input from experts and citizens and is widely supported. 5. The plan encourages everyone in the city to contribute to a green, clean, just future.
7. Climate change is a critical environmental issue, and I believe that actors at all levels of society - from international climate negotiators to individuals - need to be involved in addressing it. City governments have the power to

enact important policies and make critical investments to both better adapt to our changing climate and to reduce the greenhouse gas emissions that make the climate change problem worse.

8. Climate change is a pressing issue for our generation and future generations. Our children inevitably will be dealing with the consequences of our actions and inactions for decades to come. It is a threat to our wellbeing, economic prosperity, and social stability. It will affect people in lower economic classes more severely than those with the money to move or take measures to counter its effects. Extreme heat from the urban heat island is already affecting the livability of our city, its attractiveness to investors, and the health of its inhabitants, including our children.
9. Climate change science is real and undeniable. We collectively must come together to protect our resources as Arizonans.
10. Every city needs a plan! This plan is a good start to at least start infusing the type of sustainability thinking into the city, but I think it's in need of some expansion into the guiding principles and developing more specific strategies.
11. Good starting point BUT: Mostly incremental change, doing more of the same. Reforming and adjusting some rules, but not changing power structures. What is missing: Radical and transformative change that involves great number of people and organizations in Tempe and whole Phoenix area
12. Good to see a city actually walking-the-walk, and doing something about these issues, instead of just yakking about them.
13. I do support the Climate Action Plan. I am a supporter in green energy for the future, as long as it is at a reasonable cost. I also support work on our transportation system. Traffic has grown out of control in our city. Fixing the traffic problem is key to fighting carbon emissions. Please do not limit construction, growth is a good thing for our beautiful city.
14. I support the City of Tempe's CAP because it takes focused actions to effectively reduce GHG emission by addressing the key drivers (energy & transportation) of our communities' GHG emissions and by building resilience to extreme heat. The proposed actions combine both "structural improvements (e.g., resilience hub, bike- and pedestrian focused infrastructures) and non-structural improvements (e.g., green building codes, urban forestry masterplan, transportation demand management). The plan has been developed through a series of public engagements and using evidence-supported best-practices. Supporting this plan is one of the responses to the rightful demands for a safe and livable future expressed by the youth participants in 185 countries of the historic Global Climate Strike For Future on Sept 20.
15. I support the plan. It is important we do as much as possible to reduce and eliminate our local contribution to GHG and to create a city that is sustainable in all ways for the future. I strongly endorse the plan to create more shade on sidewalks. I walk 2 miles each way daily to work and much of the distance does not have shade. It makes a huge difference in the summer to walk in shade. I walk on College Ave. and surrounding streets, along with many ASU students and employees.

16. I think it is essential to have a climate action plan. I worry we're doing too little too late. We need government at every level to mobilize against climate change.
17. I think it's really important to support these initiatives (clean energy, public transportation, etc) to mitigate consequences such as extreme heat, air pollution, and the like.
18. I'm convinced that human-caused climate change is happening and that it is a serious problem. It needs to be addressed through cooperation at neighborhood, local, national and global levels, through government, business and non-profit activity, even if cooperation seems to be stalled at our national government level. The public needs to become engaged and this seems to be easier at the local level, including through Tempe's CAP. Also, Tempe has a great resource in ASU, which in turn can help Tempe develop knowledge that will have global, as well as local, applicability.
19. it has to start somewhere, but we cant be a cool island in a heat island. City mandates new trees on any new projects, but does a poor job on enforcing maintenance. The city should also explore opening some city facilities for shelter during heat emergencies, and also all churches should follow that example. The real question is, do we want a place where we just go from our houses to our cars to our offices, and never go outside because it's too hot?
20. It is a necessary goal to preserve man + nature
21. It is just common sense to use resources as efficiently as possible. As new cost effective technologies emerge to use the power of the sun, nuclear, etc in place of carbon base fuels, they should be implemented.
22. It is wonderful to see this collaborative CAP coming into shape, and know that Tempe is taking climate change action seriously and doing so through a consultative and participatory process. We need to think strategically about current and future changes, and this plan is the first step! Kudos to all involved. I was thrilled to see how ASU students and community members were active in the production of this important document.
23. It will make Tempe a better place to live. It's healthier to ride your bike to work or run errands than a car. You shouldn't need a car to run a quick errand within 5 miles. The constant energy use from everyone's AC in the summer contributes to rising temperatures outside - at the AC unit, but mostly at the power plant. It's great that ASU is a key partner. Experts should be in charge, not the utility companies. Having solar panels should dramatically reduce utility costs - if it's not, the utility companies are low balling our contributions back to the grid.
24. It's a well-researched proposal that addresses major areas of concern in Arizona's future. It's by no means perfect, but it's a solid platform from which to address a variety of problems and can be built out in a variety of ways.
25. It's vitally important that Cities and States adopt responsible guidelines to preserve the environment.
26. Needed
27. Preserving the environment around us is an extremely important task and if we want Tempe and it's neighboring cities to thrive we have to back more eco-friendly city planning.
28. So far, it does not seem too expensive to implement.

29. Support it as a plan of course, lacking specifics. I am from your neighboring community, Phoenix. I support any effort for our cities to work on a regional plan
30. The Southwest Energy Efficiency Project (SWEET) is a public-interest organization that works to promote greater energy efficiency in Arizona and five other states in the Southwest. SWEET commends the City of Tempe, its Staff, its Sustainability Commission Members, Arizona State University, and others for their work to develop the City's inaugural Climate Action Plan, and for designing the stakeholder engagement process to solicit feedback on the Plan.
31. This is a well thought out plan that shows Tempe to be thinking down the road. Something few other cities seem to be able to do. Tying in the resilience concepts and actions is especially forward thinking. This shows Tempe is proactive so we don't have to be reactive without a plan!
32. This is good providing it is for the City as a government, and as a direction for the City buildings/land/operations. This is not okay if talking about the individual home owner.
33. This plan is a good start for the City of Tempe to collect ideas and share priorities. However, it is missing the critical component of concrete actions: specific projects, timelines for implementation, where responsibilities lie, and who will ensure its implementation etc. Until the plan is fleshed out, it will be a nice document that most people ignore.
34. Very thorough. Covers most of the important issues and recommends many (but not all) important actions going forward.
35. We believe in climate change and support efforts to reduce the effects.
36. We have to begin at the local level in order to make a difference in the wider community.
37. We need one, and we need a good baseline!
38. We need to do something to protect ourselves from the extreme weather that has been forecasted. As the population grows, this will be more and more critical. It appears that the strategies selected will have an impact. shade, green spaces, and runoff management are important. People will not get out of their cars until public transportation saves them time or money.
39. Yes because it is critical for our future but it doesn't go far enough
40. Yes, I support the proposed Climate Action Plan, but it's not enough and needs to be more aggressive. I am aware that you know this and I am aware of the politics in Arizona, a red state perhaps moving purple. My critique is embedded in an understanding that there are seeming political limits to climate actions in Tempe, but I must also speak from the position that humans have already passed environmental limits and we, as a race, must draw back quickly even though some irreversible damage, to the environment, our home, has already been incurred.

No Responses:

1. I do not support the proposed Climate Action Plan because it does not address the real cause for climate change. The Climate Action Plan does not call for action to stop the shipping industry from polluting the Central Pacific which directly affects the jet stream which in turn affects the extreme weather we experience in Tempe as well as the rest of the country.

The Climate Action Plan does not address the pollution left behind by the 100,000 planes that cross the United States every day creating cirrus clouds loaded with toxic chemicals such as Aluminum, Barium and Sulfur. Not only do the cirrus clouds created by planes seed and over-seed storm systems, but they contaminate our water and crops. Before dismissing what I have to say as "conspiracy theory," please do your due diligence and research into the matter.

2. Interesting that the term "global warming" is out of vogue...that was the initial claim which by the new naming "climate change" the claim was "unsustainable". The only warming is that toad of the citizenry which each phase of the "climate action plan" prepares for boiling with with help to make sustainable choices until the "help" becomes enforceable with penalties for failure to comply. Nice 100% agenda 21 work.
3. The Climate Action Plan seeks to transform the way the city operates to fight against something that could possibly happen in the future. Is the City of Tempe "tilting at windmills"? Is this all an exercise in futility? What will happen to our economy as businesses and residents are faced with additional costs? Will any of the proposed actions actually do anything to combat climate change? Please carefully consider the impact on the people of Tempe as you make decisions that will greatly impact the community.
4. The real issues regarding our environment are about pollution. With all the focus on something man can't control - climate, the thing we can do something about - pollution has lost it rightful front and center position. Fact: our climate temperature has been increasing gradually for the last 20,000 years. News flash!! Man wasn't around to affect that change. Man can't affect the climate that way. Man can affect pollution of air, water, etc. My generation has been addressing this and drastically improving the situation since I was a child, before some of you who are ignorant of the real issue were born. Man CANNOT affect the climate. Man can affect pollution, yet the world has become dirtier and dirtier because of the policies of those so blindly focused on climate change.
5. you need to educate young people to live as arizona people have for years, consolidated driving trips to maybe once a week. take care of feeding yourself at home most days. they run up and down the road several times a day. work trips are necessary, but other things can be taken care of on those trips.

Did not answer yes or no:

1. Aiming for 2050 for carbon neutrality is not enough. Tempe must reach out to surrounding cities to pool our resources so this can happen faster.
2. **In your view, are there actions that the draft plan missed related to energy, transportation and extreme heat?**
 1. Actions to limit use of so much heat-generating concrete and rock landscaping.
 2. Any plans to increase number of trees in parking lots or somehow cool these areas? Or does responsibility remain with owners of properties.

3. Collaboration needs to be an integral part of all these strategies. Climate mitigation means nothing if the issue isn't being addressed across all AZ. Tempe should spearhead frequent meetings of city stakeholders to discuss climate strategy and share adaptive techniques. Open sourcing as much data as possible should also be important; stakeholders should be able to see the impact of different initiatives and provide feedback continuously to help optimize the implementation of new strategies. More eyes are better.
4. Create city sales tax exemption certification for businesses purchasing solar panels, or other eco-friendly purchases. Educate Tempe drivers of sharing roads with bicyclist and keeping them in mind when driving.
5. Development of the bike lane network in Tempe! Bike lanes are sorely missing on major roads across Tempe, which is discouraging biking as an alternative form of transportation in Tempe. City coordinated composting!
6. Doesn't go far enough or deep enough. Need to push energy providers to move faster towards renewable energy for all users.
7. Energy to cool is getting expensive. During summer months, when Phoenix city buses break down notoriously often, many pedestrians carry umbrellas to protect their skin, and those without cover often "shadow walk", following the shade of palm trees, and buildings to avoid direct exposure to a sunshine that can cause humans to overheat. The city's poorest residents are most at risk. Fans and cooling systems can save lives, but some people just don't have the funds to fix their air conditioning or have working equipment,
8. Excellent start
9. Hello! extreme heat is due to so much asphalt and taking away open grass spaces. Look around you! Look at ASU - turning land into buildings and parking lots. That is what affects extreme heat. It is cooler in places that have open grassy land, yet we keep building buildings and wonder why there is extreme heat in the cities. NOT climate change folks.
10. I am still saddened by the fact Uber was forced out of Arizona, costing 300 jobs and countless possibilities of innovation for our future generations.
11. I recommend that, to mitigate extreme heat and other issues related to climate change, including water shortage and loss of biodiversity, Tempe, through it's Urban Forestry Plan adopt biodiversity performance measures. This would drive actions that would have multiple benefits: 1. Planting more trees and vegetation that evolved in the local ecosystem, that also provide shade and mitigate heat, would save more water and support more native insects, birds and other wildlife. 2. Biodiversity, like trees may benefit human health and mental well-being. Because of its positivity, a focus bringing attention to Tempe's biodiversity efforts is likely to help engage the public in the entire CAP. 3. This effort would be a great opportunity to engage ASU. Because Arizona has lost most of its natural riparian habitats and replaced them with irrigated suburban habitats, Tempe could use its water resources wisely and become a leader in living with nature, improving human quality of life and saving species from extinction.
12. I was surprised to see very little explicit attention to equity, although that is highlighted as a principle of action and many of the residents' inputs pertain to concerns over equity and addressing the most vulnerable. For every intervention, it is important to think through who needs to be benefited most, how access to the benefits is mediated, and what costs of

climate impacts are borne by what segments of society. For example, recent reporting over the lack of overnight accommodation for residents most vulnerable to heat exposure in Phoenix was revealing. Cool spaces in the city that close at 5 pm are of little use to vulnerable residents. How to ensure the elderly and infirm, as well as the homeless are accommodated and protected is critical. Access to transportation options, and what populations are able to benefit from what forms of transport infrastructure is also important. The residents' inputs, as featured in quotes in the document, did not seem to be addressed by the proposal action items, and thus there seemed to be a disconnect between some of the concerns of residents and what was being proposed as a way forward.

13. It is a good start. None of us want to change how we live, travel, work, and recreate and how we build our homes, businesses, and infrastructure, but unless we start making changes now, we will be forced to make more dramatic changes in the future. Having said that, the plan is not outlining dramatic changes, but sensible changes that will enhance our wellbeing and the vitality of our city. We want Tempe to be on the leading edge of this issue.
14. It is all too general. We need specific actions residents and city employees must take to reduce emissions- like driving less, new electric vehicles + scooters
15. No, I think everything mentioned in the draft plan are great actions to take. Expanding public transportation systems in the metropolitan area is extremely important to reduce the use of cars and carbon emissions.
16. No. These are good topics that seem to cover everything for now.
17. Not at this stage.
18. Please be sure to consider the (human and wildlife) health effects of LED lighting as you transition the city's streetlights to LED. The color temperature of the LED lights should be no higher than 3000 K according to AMA guidelines: <https://www.cnn.com/2016/06/21/health/led-streetlights-ama/index.html>
19. Probably but I'm not an expert in this area.
20. Really concerned about the lack of equity and completely leaving out the homeless communities of color & low income communities
21. Regarding this statement: "By investing in infrastructure that will cool Tempe, we are creating a city that can protect residents from extreme heat". Um... someone forgot to read that memo to the people allowing all the ASU-related dorms/buildings to be constructed at such a torrential rate. I'd say there's probably 500% more concrete in Middle-Tempe than there was just 10 years ago. Is it really in the City's interest to allow ASU and its "remoras" to expand indefinitely? It's pretty simple... more concrete = more heat retained and less dissipated over night. Not to mention increased vehicle exhaust and A/C heat-venting. Sure, the students and staff *inside* the air-conditioned buildings won't care, however.....
22. see above
23. Strategy for engaging and collaborating with city departments that will be affected by the CAP. Other carbon sequestration tech/offsets?
24. SWEEP suggests that the City of Tempe's Climate Action Plan should have an explicit numerical target to reduce energy use in city-owned buildings thereby strengthening the role that energy efficiency plays in reducing

Tempe's projected greenhouse gas emissions. Energy efficiency is one of the most cost-effective actions for meeting climate mitigation goals. Below are examples of cities across the southwest that are considering energy efficiency as one of the highest priorities in their climate action plans. SWEEP believes Tempe could strengthen the role that energy efficiency plays in reducing its projected greenhouse gas emissions by adopting an explicit goal to reduce energy use in city-owned buildings. Other cities with similar goals can serve as models including: - The City of Baltimore, which committed to reducing city government energy consumption by 30% by 2022 from a 2006 baseline. The City of Cleveland, which set targets to reduce total energy consumption across all city departments by 5% below 2010 levels by 2016, 10% below 2010 levels by 2020, and 20% below 2010 levels by 2030. And, the Knoxville City Council, which adopted a 20% by 2020 energy reduction goal.

25. Tempe Council should pass a resolution in support of HR 763, the Energy Innovation and Carbon Dividend Act. Without a national plan, we will all fail to achieve adequate mitigation of climate change. Transportation: "Our transportation system in the Valley is built around the single-occupancy vehicle. In Tempe, transportation contributes to nearly half of Tempe's community GHG emissions." The City needs to emphasize that reducing air pollution (not just GHG emissions) that directly affects human health is a critical co-benefit of reducing GHG emissions from fossil fuel combustion. Transportation: good start "Pilot solar EV charging to capture and store energy during peak sunlight hours. Require EV charging stations - Allows people to charge their EVs. Tempe can increase the number of public charging stations and amend building codes to support their installation. An increase in charging stations can lead to an increase in EV ownership. EVs can contribute to the reduction of GHG emissions by reducing the emissions coming from fossil fuel-powered vehicles." These steps are critical to incentivize daytime charging when renewable solar power is abundant. However, a more aggressive plan is needed. Consider banning diesel vehicles by 2025 (or implement steep charges for use), implementing no-idle restrictions, and allowing only zero emission vehicles in the City downtown area by 2030 (including all roads surrounding ASU). <https://www.cnn.com/2019/08/26/business/amsterdam-zero-emissions-vehicles/> Good start: "new safe street and intersection designs that prioritize pedestrians, bicyclists, and transit riders can be installed in transportation infrastructure projects." Tempe needs to implement protected bike and pedestrian ways. University east/west at Rural Rd has a bike lane but it is not safe or protected from aggressive motorists and that is a key reason why there is high sidewalk use by bicyclists. The City should consider implementing a two-way path on the south side of University Dr to the east of Rural Rd (because of the large number of students in residence on the south side of University in the Dorsey area), and possibly other areas of University Dr. The City should also consider implementing above-grade crossings for ASU access by bikes and peds, such as across Rural Rd just south of University Dr. Trees: Please select vegetation that helps make it possible to eliminate the use of leaf blowers in City operations. These are a public health nuisance for dust generation, for dirty fossil fuel emissions, and for noise.

26. Tempe needs a comprehensive alternative/ transformational vision that people can rally behind and get really excited about. eg. get rid of cars around elementary schools and have safe bike lanes so it is safe for kids to ride to school
27. The city collects and disposes of wastes generated within its borders using fees collected through the utility bill--such as solid and sewage wastes. It does not however collect and dispose of atmospheric carbon wastes and allows all residents and businesses to haphazardly dispose of these global-warming wastes into the atmosphere. There are a number of companies world-wide that have developed carbon extraction/air capture technology. In fact ASU has a center that studies these processes. The processes are not highly utilized however, as companies struggle to pay for their efforts as they try to find ways to profit from the captured carbon. However using a municipal waste model, cities could contract with and pay companies to capture and sequester atmospheric waste in the ground--akin to how cities dispose of most wastes. Tempe should become the first city in the nation to charge a monthly fee in its utility bill to dispose of atmospheric carbon wastes. Tempe could work with other like minded cities to do joint bids to dispose of atmospheric carbon. Remember that initially recycling programs were only offered by a few cities in the United States. Now almost every city in the U.S.A. has a recycling program. The goal of Tempe starting an atmospheric waste fee and collection program would be for such an atmospheric carbon collection effort to spread universally--just as occurred with municipal recycling. While one might argue federal and state governments should be conducting such programs--they are not. It is time for municipalities to step up and shoulder this responsibility.
28. The plan seems to miss larger scale things that could be done to make the city more sustainable. Increasing density is key to reducing energy consumption and emissions. Dense housing is more energy efficient and the closer work is to housing the more we can reduce car usage.
29. This first CAP does not necessarily miss any actions as the first CAP aimed to take targeted and select actions while entailing the commitment to evolve into an extended CAP. Going forward, specifications could be included, e.g., the building code should require better insulation of homes to save energy and reduce emissions. Renewed policy effort should direct utilities to strengthen residential and commercial solar expansion. All new developments should include a review that assesses whether the proposed development contributes to the goals of the CAP through building and green infrastructure design, siting, connection to public and alternative transport.
30. Using green energy during solar hours is great, but it poses an issue for households that use the peak hours plan (more expensive during solar hours) how do we address that? What about improved bike lanes? Faster, more efficient light rail? What is the trolley doing? Can we start replacing roads/ sidewalks w/ "Thirsty Asphalt Concrete"?
31. Waste management- zero waste, etc.
32. WATER USE. Stop telling people in Tempe their yards need to be a "verdant" green and start rewarding folks for zero-scaping, graywater systems, and electric transportation. The Colorado River is at risk to physically dry up and our water conservation efforts are laughable.

33. Would like to see air quality measurements recorded and available to view so actions can be taken to eliminate bad air quality days.
34. Yes, concrete actions of best practices to drive change: 1. Partner with and provide incentives to HVAC contractors and suppliers to install energy-efficient equipment 2. Update Tempe code to require new construction and major renovations to have electrical systems that are "solar-ready" and "EV charging-capable" to eliminate costs for future installations. Buildings should also have increased insulation requirements and air tightness requirements. 3. Implement pilot projects with companies such as Ice Bear Energy Storage - thermal storage for cooling on residential and commercial scale. California municipal utilities have already done so; Tempe would pioneer the program in Arizona. With our lengthy cooling season, ice storage is a lower-cost and more durable form of energy storage. 4. Streamline permitting and inspections for solar PV systems - likely by hiring additional staff to reduce the lengthy delays for these projects. 5. Increase the number of bike "corridors" in the City - the College Ave, Country Club, Alameda, etc. routes are very helpful but there are still gaps for those that are trying to get around the city. 6. "Solarize" campaigns have been highly successful at increasing solar PV. Tempe should launch a Solarize Tempe campaign for PV. Additionally, Tempe could use the "Solarize" model to engage large numbers of residents to get home energy audits done or to install shade screens on their windows.
(<https://www.energy.gov/eere/articles/making-difference-solarize-programs-accelerating-solar-adoption>) Finally, the peak electricity use numbers listed on 36 are unclear - what is that energy representing? Tempe city buildings?
35. Yes, I think these are good starts but we also have to look at closing the loop (composting, recycling, ditching disposables) and environmental racism. It's important that actions taken do not just shift the consequences or burden from the majority of citizens to those on the fringes; it has to be inclusive, feasible, and effective for all of us.
36. Yes, I'd like to see recycling, use of compostables, and the reduction of plastic included.
37. Yes, such as economic analysis, especially since we have a council member who has a vested interest in the ASU sustainability program.
38. Yes. Tempe is one of the more climate-friendly cities in the Phoenix region, and with this CAP, it is poised to become even more climate friendly. This is great news, and because of this, I think Tempe can and should have a goal of *increasing its share of the regional population* as part of the climate plan - especially focusing on attracting people who work in Tempe to also live in Tempe. The rationale is this: If a household is considering moving either to or within the Phoenix region and chooses to live in Tempe, chances are that the household will have a smaller climate footprint than if it relocated to another city in the region. This is especially true if the employed members of this household work in Tempe. Based on my own research (I'm on the urban planning faculty at ASU), I have found that many households looking to move have a hard time finding what they are looking for in Tempe. They often end up moving to other cities, and endure lengthy car commutes as a result - which is bad for the climate (and has a host of other negative impacts for our region). Taking action as part of Tempe's

CAP to try to reduce this would be fantastic. Of course, if more people who work in Tempe move to Tempe, this wouldn't directly reduce Tempe's emissions (it would increase them, actually), but it could substantially reduce *regional* emissions. In terms of emissions accounting, then, a small step in this direction would be to use *emissions per resident* as the metric by which we measure progress, rather than total emissions. This would mean that at least we are not penalizing ourselves with larger total emissions numbers if our city population increases. A larger step in this direction would be to devise a way to account for the average emissions *decrease* that occurs for each person that moves to Tempe instead of to another city in the region. Devising policy actions to incentivize Tempe employees to become Tempe residents requires some creativity, but I'm certain that there are things that could be done. Our research suggests, for instance, that some realtors may be steering their Tempe-employed clients away from Tempe homes because of the relative difficulty of making a home sale here compared to in neighboring cities. Working with the real estate industry to raise awareness to reduce this practice could be one action.

39. Yes. The plan misses the fact that you can't have sufficient solar power when cirrus clouds are blanketing the valley nearly every week. The plan also misses infrastructure for roads and storm water drainage. The roads we are using right now are getting pretty bad, mainly in residential areas. There are potholes and patches everywhere, but no sign of road rebuilding anywhere. I know that the drainage system is not up to par as the City of Tempe FB page is constantly telling people to get sandbags before every monsoon season. If the City is so confident about the drainage system, why are we being reminded to pick up sand bags every year? Also, I have not heard anything about the flood zone on the US60 and Mill Ave. getting repaired. That area has flooded during the monsoon for decades now and still has not been fixed. As for the extreme heat, I am seeing a connection of bunker fuel i.e. Ship Tracks forming the eastern Pacific off the coast of Baja California before every heat wave we have. Maybe we should take a look at the shipping industry about the extreme heat we receive.
40. You forgot to get individuals engaged. many people want to help, but don't know what to do, or how to change their lives. If you are able, push to implement a personal carbon accounts/allowances plan, see the work of Martin Burgess, here: <http://theconversation.com/plastic-ban-isnt-enough-so-lets-take-another-look-at-personal-carbon-accounts-90327> - No city has done this yet, Tempe can be the first; Wales is considering it now. It's like a discount card for fossil fuels, until your points run out, and poor people can redeem unused credits. It would help solve more than one problem in Tempe, we could pilot an example, all while helping people become aware of their own energy usage. Most people don't have a clue; they cant see/track carbon.

41. What one action related to environmental change should be included in the next Climate Action Plan?

1. Actions to limit use of so much heat-generating concrete and rock landscaping.
2. Advanced modelling of temperature, GHG emission as well as advanced measurement methods should be worked in conjunction with ASU. Plenty of research capabilities at ASU will make this a mutually beneficial approach.
3. Air quality measurement
4. Biodiversity and pollinators preservation!
5. City of Tempe employers have free bus passes provided by the City
6. Climate justice
7. Commercial/Church/School recycling programs. More informed recycling guidelines and opportunities (soft plastics!), rules to reduce plastic use, and compostable services
8. Concrete, whether for the City of the home, should be of a permeable nature to absorb water into the ground (wherever feasible). This would help the water table/plants, assuming the water is not contaminated by business or residential chemicals.
9. Definitely movement towards zero carbon and local generation and storage of solar energy. Helping households become change agents should also be an item: mechanisms to support behavioral change and equitable access to adaptation and mitigation opportunities and benefits.
10. Eco-related city sales tax exemption certification
11. Emissions reduction -- that is key. We need to make big changes in this area.
12. Emphasis on conservation of native insects, plants and animals
13. Extreme heat
14. Food security. Tempe should think critically about how much of the communities' food comes from out of state and what we can reasonably produce here as a supplement to that.
15. Goals--how much reduction of fossil fuel use by what date.
16. Green economic development that also creates broad economic justice.
17. <https://haasinstitute.berkeley.edu/blog-climate-plans-green-cities-must-confront-environmental-racism>
18. I grew up with signs about fines for littering. Where did they go? Bring them back and enforce it.
19. If you haven't already, work with ASU's School of Sustainability
20. Implement a "Solarize" campaign to increase solar adoption
21. Interactions with heat and extreme ultraviolet reactions on plastic materials, no one knows how 96°F degree cold water supply from underground plastic pipes will react in the future. It could mean undrinkable.
22. New codes for construction that require commercial businesses to meet a certain level of sustainability. There is a lot of commercial construction in Tempe these days and many of the buildings don't look like they are designed to minimize solar heat loading and other factors that increase energy usage.
23. None at this time.

24. Promotion of local food economy with a strong focus on sustainability. This action ties in nicely with the CAP's goals and creates additional co-benefits: Local food production and processing reduces food miles and regionalizes supply-chains (CAP goals: energy, transportation), supports native and heat-adapted plants (CAP action: urban forestry masterplan), and creates employment that attracts our youth.
25. proper education is vital. heat and weather conditions of nature can not be changed, but peoples habits can.
26. Revise landscaping rules in city code to allow greater yards
27. see above
28. See the personal carbon accounts/allowances plan I mentioned above.
29. Set clear goals for reducing car usage in Tempe. Set benchmarks and a plan to reduce the number of cars driven in Tempe.
30. Start thinking in terms of limiting new construction. There are already too many huge buildings around-- not to mention all of the resultant traffic. Are we really trying to just be another LA, or what?
31. Support carbon fee and dividend at the national level.
32. SWEEP supports including an electric vehicle enablement goal that correlates to the electric vehicle enablement goal in which the Salt River Project recently adopted.
33. Tempe should become a Biophyllic City with a focus on increasing biodiversity, tree canopy and green infrastructure in a landlocked city that doesn't have undeveloped desert that can be preserved.
34. The one action I would like to be included in the next Climate Action Plan is the action of letting everyone live how they want to live. Do not try to force people to live a certain way just because a few psychopaths have decided to destroy the planet for their own financial gain.
35. there shouldn't be a next Climate action plan, since the premise that carbon dioxide and private vehicles are warming or "changing" the climate is a proven falsehood.
36. Traffic Control
37. Traffic is at its limit, but it shouldn't need to be that way. Businesses should allow workers to flex their schedules or work from home to avoid rush hour and ozone warnings. Sitting in rush hour produces carbon monoxide, and it's dangerous to everyone's health.
38. Water conservation. Even if the Sonoran desert is the most humid desert on Earth. It is still a desert. Therefore more effective water conservation laws need to be put into place to conserve the environment on which Arizona's cities are built.
39. Water use and reuse
40. We would like free electric car charging stations throughout Tempe.
41. Zero-waste initiatives. Bulk stores. Workshops to reduce waste.

42. Please share any ideas you have around ideas to engage with the community on sustainability issues.

1. Again - see the personal carbon accounts/allowances plan I mentioned above. Also, try to declare a climate emergency, because it is an emergency, we have 10 years to cut emissions in half, not thirty. For example, imagine that every year, 10% of the population stops driving a car. Just as an example, this is the kind of transformation level thinking we need to adopt. Of course, I sound super radical, but from a bio-physical point of view, it's not radical at all, it's the normal response. If we want our house to stop burning, we need to dump water on it, not just watch; it's that simple. I know you are all very bright, but I am happy to come visit and talk more about my ideas, if interested. I am an environmental sociologist working at ASU (as many of you are).
2. Corporate it into the local education curriculums.
3. Create more community gardens to grow locally sourced foods. Advertise public transportation more often. Engage schools on renewable energy.
4. Education is key. Including messaging and resources in every City communication will eventually reach the residents. Equipping Block Watch coordinators with information and resources to pass to neighbors. Campaigns in the schools and ASU to set examples of limiting our waste and plastic use.
5. Emphasize the short-term local benefit of better air quality by reducing fossil fuel combustion. Bad air quality is detrimental to everyone's health.
6. Encourage land-owners to replace lawns with native plants and flowers. Reach out to high schools to give educational assemblies about what students can do to help
7. Facilitate collective climate action - build partnerships with enterprises and organizations that support climate action - and showcase what they do. Identify climate change action champions (citizens) - and showcase what they do. Support youth in organizing Fridays for Future in Tempe.
8. For both single-family and multi-family residents, energy-efficient upgrades to appliances and home fixtures can be a fantastic opportunity to engage Tempe residents on sustainability issues, as energy auditors and home performance contractors are discussing face-to-face ways that the community can reduce their energy consumption while also saving money. SWEEP suggests working with Tempe-based home energy auditors to ensure that the most cost-effective opportunities to upgrade Tempe's building stock are being acted upon.
9. Go to the high schools to talk with the students that will have to live with a changed climate.
10. Help make changes/upgrades economically affordable, to encourage the changes.
11. I attended many of the community engagements leading up to the CAP and all of them, but in particular the last one (Sept 10th) were extremely well attended by a large and diverse audience. This is a great success and a clear expression of interest to build upon going forward, working with the groups that were represented at these events (e.g., the young leader of the local youth climate strike community, leaders of racial equity and diversity were present, progressive business leaders).

12. I think it's important to ensure that we engage with communities that may typically not be included on topics such as sustainability. That may include addressing language barriers + location of meetings.
13. Ideally, we all would love to live and work in the same city. One big barrier is if you live in Tempe and work elsewhere in the valley or vice versa. It becomes hard to be car independent that way and avoid traffic. Maybe have incentives to relocate in the valley. Make it easier to sell/break lease in Tempe if you changed jobs to another location in the valley. Or even easier to buy/rent a home in Tempe if you got a new job in Tempe. This will limit the amount of traffic Tempe residents will contribute daily. I think most people would prefer to live closer to where they work if it didn't have so many disadvantages to relocate.
14. If I were to share my ideas to engage with the community, would you care? Would you share the ideas that I have and share it with the community even if it is against your agenda?
15. Keep the surveys coming.
16. Like CA, Cap + Trade for companies might work. Or reduced taxes to pursue environmental + sustainable practices
17. Marketing campaign & sponsored community events to educate & offer resources to the community. Local businesses coalition/group to advise on implementation of sustainability issues (in private sector). Social equity/climate justice committee to draft a climate justice strategy.
18. More public education/publicity regarding the benefits of the Orbit and light-rail systems. Too many people ignore the overall picture, and just focus on the immediate cost.
19. Partner with local clean-up and environmental stewardship events to promote the next Climate Action Plan
20. Pay them money to reduce emissions
21. Please follow up with me on the equity updates that were mentioned. I am interested in helping to improve the equitable lens lacking here.
22. Provide a way to contribute ideas for community members at library, community centers, GAIN events, neighborhood meetings. There needs to be a change from "us vs. them" to "we". Regular community members need to feel like they don't need a sustainability degree to have worthwhile ideas that are relevant for the community
23. Reach out to ASU clubs to present. Student economies association hosts debates. Ask for a carbon tax debate. They'll let you introduce your org and give a quick overview.
24. Reach out to younger people in Tempe who will have to take the brunt of climate change and those who disproportionately use alternative forms of transit to figure out how it can be made more appealing and useful for more people.
25. Sad that we frame the climate change debate as a matter of temperature. It is instead, the largest chemical experiment ever tried. I understand we've passed our 50 millionth man made chemical. Congratulations. We use 64,000 unnatural chemicals each and every day as we do our business. We have absolutely no idea what can/might happen with extreme heat and harmful sun exposure and should very simply adhere to the Precautionary Principle.
26. See above.

27. Should be an item on every city council meeting agenda. Booths at every city event. Concrete ideas for every household to do their part.
28. Some apartments around Tempe do not have a recycling program. This is very disappointing and should be addressed ASAP!
29. Tempeans should familiarize themselves with Agenda 21. They can view the utube video "the great global warming swindle" and many other sources, including quotes from agenda 21 such as: "Effective execution of Agenda 21 will require a profound reorientation of all human society, unlike anything the world has ever experienced a major shift in the priorities of both governments and individuals and an unprecedented redeployment of human and financial resources. This shift will demand that a concern for the environmental consequences of every human action be integrated into individual and collective decision-making at every level."
30. The school system (K-12) is perhaps under-utilized as a communication forum. Kids are great communicators and change agents within their families. Churches are also great venues.
31. There needs to be education about green infrastructure within neighborhoods. In South Tempe, there are neighborhoods designed without storm sewers where front and, in some cases, backyards, act as stormwater retention basins. In my experience, this is not well understood by the residents. I see the morphology of front yards being changed (basins filled in, hard infrastructure put in place that impedes water from flowing into yards, etc.) and people are not taking advantage of how natural rainfall can be used to water their front yard vegetation. And yet, this is the area of the city that has the highest water consumption and the highest concentration of trees. It is an opportunity to educate people on how to best use the stormwater infrastructure already in place in their neighborhoods and yards. Why not do a demo in someone's front yard versus a soulless presentation in some conference room to get at this localized issue? Every little effort helps toward the greater good.
32. Think creatively about benefits for other sectors to engage them. For example, reducing heat and increasing green spaces may get kids and adults outside. Public transportation has been demonstrated to increase walking. Both of these strategies can help with our obesity epidemic. Use this evidence to engage the health sector.
33. Volunteer projects like tree planting or solar installation. Post dozens of problems publicly that anticipated to affect the city and solicit feedback/provide prizes for research or proposals related to addressing them. Publish data related to major Tempe waste streams and see if any businesses can use others' byproducts. You have a small sustainability team; work with the School of Sustainability Policy class and have students spend their semester researching the viability of different future initiatives rather than relying on the half dozen or less employees who are dedicated to sustainability. Host chats at Tempe schools and do volunteer outreach there. Start more sustainability demonstration projects at local parks/schools, things like hydroponic displays, community gardens, pool conversions, low-water use plants, etc, similar to Escalante Garden or the Clark Park Garden. Give greater emphasis on citizen feedback during the approval process for new developments. Have a monthly or quarterly highlight of sustainability leaders.

34. We need to be good stewards of the earth by keeping it clean and encouraging community clean-up efforts. We need to educate our young folks and stop scaring them with false claims about climate change. Use the words "pollution" and "stewards of the earth" and stop lying about something not in our control.
35. While sustainability is the crucial goal, improving quality of life; making life more exciting and fulfilling, may be more motivating to the public. George Monbiot makes this argument in his book, "Feral," where he advocates rewilding Britain rather than maintaining its centuries old deforested status quo. Making Tempe a Biophyllic City, or some equivalent, would be in line with this. Also, the Maryann Corder grant, which involves engaging neighbors in planning local improvements, such as street shade trees, is a great example of City initiatives that leverage public engagement. Finally, Tempe becoming famous globally as a green innovator in the desert will give local residents more pride in living here, more affection for the natural world and more motivation to get involved.
36. Workshops! Everyone innately loves to learn. Teach them effective ways to conserve energy, water, and other resources.
37. You are doing a great job and have covered an amazing amount of important topics. Thank you!